

Amendments to the Claims

The listing of claims below is intended to replace all prior listings of the claims in the present application.

1. (currently amended) A ~~DNA~~ nucleic acid construct comprising:
one or more operatively linked nucleic acid molecules, wherein the nucleic acid molecule encodes a Kunitz-type serine proteinase inhibitor isolated from *Brassica oleracea*, wherein the serine proteinase inhibitor has insect having antibiosis activity; and having a
an operably linked ~~to a~~ heterologous DNA promoter; and
an operably linked 3' regulatory region.
2. (currently amended): ~~A DNA~~ The nucleic acid construct according to claim 1, wherein the nucleic acid molecule either: (a) has a nucleotide sequence of ~~SEQ. ID. No. SEQ ID NO: 1~~; (b) encodes a protein having an amino acid sequence of ~~SEQ. ID. No. SEQ ID NO: 2~~; or (c) hybridizes to ~~at the DNA~~ a nucleic acid molecule having the nucleotide sequence of ~~SEQ. ID. No. SEQ ID NO: 1~~ under stringent conditions characterized by a hybridization buffer comprising 1M NaCl, 50 mM Tris-HCl, pH 7.4, 10 mM EDTA, 0.1% sodium dodecyl sulfate, 0.2% ficoll, 0.2% polyvinylpyrrolidone, 0.2% bovine serum albumin, 50 µm g/ml *E. coli* DNA at a temperature of 56°C for 20 hours.
3. (currently amended) An expression system comprising:
~~the DNA nucleic acid~~ construct according to claim 1.
- 4 (currently amended) A host cell ~~transduced~~ transformed with the ~~DNA nucleic acid~~ construct according to claim 1.
5. (currently amended) ~~A~~ The host cell according to claim 4, wherein the host cell is selected from the group consisting of a bacterial cell, a virus, a yeast cell, and a plant cell.

6. (currently amended) A ~~The~~ host cell according to claim 5, wherein the host cell is a plant cell.

7. (currently amended) A ~~The~~ host cell according to claim 5, wherein the host cell is a bacterial cell.

8. (currently amended) A transgenic plant transformed with a ~~DNA~~ nucleic acid construct according to claim 1.

9. (currently amended) A ~~The~~ transgenic plant according to claim 8, wherein the nucleic acid molecule either: (a) has a nucleotide sequence of ~~SEQ. ID. No.~~ SEQ ID NO: 1; (b) encodes a protein having an amino acid sequence of ~~SEQ. ID. No.~~ SEQ ID NO: 2; or (c) hybridizes to ~~at the DNA~~ a nucleic acid molecule having a nucleotide sequence of ~~SEQ. ID. No.~~ SEQ ID NO: 1 under stringent conditions characterized by a hybridization buffer comprising 1M NaCl, 50 mM Tris-HCl, pH 7.4, 10 mM EDTA, 0.1% sodium dodecyl sulfate, 0.2% ficoll, 0.2% polyvinylpyrrolidone, 0.2% bovine serum albumin, 50 µm g/ml *E. coli* DNA at a temperature of 56°C for 20 hours.

10. (currently amended) A ~~The~~ transgenic plant according to claim 8, wherein the plant is selected from the group consisting of Gramineae, Liliaceae, Iridaceae, Orchidaceae, Salicaceae, Ranunculaceae, Magnoliaceae, Cruciferae, Rosaceae, Leguminosae, Malvaceae, Umbelliferae, Labitatae, Solanaceae, Cucurbitaceae, Compositae, and Rubiaceae.

11. (currently amended) A transgenic plant seed transformed with a ~~DNA~~ nucleic acid construct according to claim 1.

12. (currently amended) A ~~The~~ transgenic plant seed according to claim 11, wherein the nucleic acid molecule either: (a) has a nucleotide sequence of ~~SEQ. ID. No.~~ SEQ ID NO: 1; (b) encodes a protein having an amino acid sequence of ~~SEQ. ID. No.~~ SEQ ID NO: 2; or (c) hybridizes to ~~at the DNA~~ a nucleic acid molecule having a nucleotide sequence of ~~SEQ. ID. No.~~ SEQ ID NO: 1 under stringent conditions characterized by a hybridization buffer comprising 1M NaCl, 50 mM Tris-HCl, pH 7.4, 10 mM EDTA,

0.1% sodium dodecyl sulfate, 0.2% ficoll, 0.2% polyvinylpyrrolidone, 0.2% bovine serum albumin, 50 μ m g/ml *E. coli* DNA at a temperature of 56°C for 20 hours.

13. (currently amended) ~~A~~ The transgenic plant seed according to claim 11, wherein the plant is selected from the group consisting of Gramineae, Liliaceae, Iridaceae, Orchidaceae, Salicaceae, Ranunculaceae, Magnoliaceae, Cruciferae, Rosaceae, Leguminosae, Malvaceae, Umbelliferae, Labitatae, Solanaceae, Cucurbitaceae, Compositae, and Rubiaceae.

14. (currently amended) A method of conferring resistance to insects to plants comprising:
transforming a plant or plant seed with the ~~DNA~~ nucleic acid construct according to claim 1 and
growing the transformed plant or plants produced from the seeds of a the transformed plant under conditions effective to impart resistance to insects.

15. (currently amended) ~~A~~ The method according to claim 14, wherein a transgenic plant is provided.

16. (currently amended) ~~A~~ The method according to claim 14, wherein a transgenic plant seed is provided.

17. (currently amended) ~~A~~ The method according to claim 14, wherein the serine proteinase inhibitor either: (a) has a nucleotide sequence of ~~SEQ. ID. No.~~ SEQ ID NO: 1; (b) encodes a protein having ~~an~~ the amino acid sequence of ~~SEQ. ID. No.~~ SEQ ID NO: 2; or (c) hybridizes to ~~at the DNA~~ a nucleic acid molecule having a nucleotide sequence of ~~SEQ. ID. No.~~ SEQ ID NO: 1 under stringent conditions characterized by a hybridization buffer comprising 1M NaCl, 50 mM Tris-HCl, pH 7.4, 10 mM EDTA, 0.1% sodium dodecyl sulfate, 0.2% ficoll, 0.2% polyvinylpyrrolidone, 0.2% bovine serum albumin, 50 μ m g/ml *E. coli* DNA at a temperature of 56°C for 20 hours.

18. (currently amended) ~~A~~ The method according to claim 14, wherein the insects are selected from a group consisting of the orders of Lepidoptera, Coleoptera, Diptera, Homoptera, Hemiptera, Thysanoptera, and Orthoptera.

19. (currently amended) ~~A~~ The method according to claim 14, wherein the insects are *Heliothis viresens* (tobacco budworm) or *Heliocoverpa zea* (corn earworm).

20. (currently amended) ~~A~~ The method according to claim 14, wherein the transgenic plant is selected from a group consisting of Gramineae, Liliaceae, Iridaceae, Orchidaceae, Salicaceae, Ranunculaceae, Magnoliaceae, Cruciferae, Rosaceae, Leguminosae, Malvaceae, Umbelliferae, Labitatae, Solanaceae, Cucurbitaceae, Compositae, and Rubiaceae.

21-28 (withdrawn)